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THE HOME GARDEN IN THE SOUTH.

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INTRODUCTION.

In regions where cotton is the principal crop a well-kept garden is the exception, and even in localities where commercial vegetable production is the main industry there is a scarcity of fresh vegetables during a large part of the year. In fact, no feature of southern agriculture is more neglected than the production of vegetables for home use. Growing one crop to the exclusion of all others tends to impoverish a community, because it necessitates sending money out of the community for many of the necessities of life which can and should be produced at home. The farmer who buys vegetables is not only paying the cost of production but is also paying the cost of transportation and marketing. Even if vegetables can be bought more cheaply than they can be produced by the farmer, there are many reasons why they should be grown at home. It is not always possible to secure vegetables in country communities, and those that can be secured are usually stale and inferior in quality to the home-grown product.

It is a well-known fact that fresh vegetables make up a very small part of the diet of the southern farmer's family. It is impossible to make an accurate estimate of the value of the vegetables which may be grown in home gardens in the South, but it is safe to say that a well-kept garden will yield a return eight to ten times as great as the return from an equal area devoted to cotton or to other general farm crops. Of even greater importance than the money value of the products of the garden is the satisfaction of having a bountiful supply of vegetables close at hand where they can be secured at a moment's notice.

NOTE.—This bulletin is intended to encourage the growing of fresh vegetables for the farmer's table; it is suitable for distribution throughout the South.

Vegetables and fruits furnish a large part of the essential salts which are absolutely necessary to the well-being of the human system, so that the value of vegetables in the diet is a great deal more than the mere food or money value. The need of tonics and other medicines in the spring is due largely to the lack of vegetables and fruit in the winter diet. If more succulent food were available, less money would be spent in doctor's fees and for medicines.

Fresh vegetables from the home garden are not subjected to exposure on the market and are not liable to infection. Many vegetables lose their characteristic flavor within a few hours after gathering. The home vegetable garden is worthy of greatly increased attention by the southern farmer, and a larger number and greater variety of crops should be grown in the garden.

This bulletin gives suggestions as to the location, plan, and arrangement of the garden, the soil and its preparation, manures and fertilizers, the seeds and plants to use, together with brief descriptions of the methods of handling the more important vegetables and suggestions regarding varieties to use to secure a varied and continuous supply throughout the year.

LOCATION OF THE GARDEN.

In selecting the location for a home vegetable garden the question of proximity to the house should be given first consideration. As the work of caring for the garden is usually done in spare time, the location selected should be as near the house as possible. The slope and type of soil should be the next considerations. A slope to the south or southeast is usually preferable, because here the soil warms up early in the spring, which permits early planting and stimulates the early growth of crops. Practically any type of soil can be used for the garden, but a sandy loam is to be preferred.

Good drainage is of prime importance. The land should have sufficient fall to drain off surplus water during heavy rains, but the fall should not be so great as to wash the soil. If the land near the house is level, artificial drainage should be employed. Open ditches or tile drains will be satisfactory. On level land that is not artificially drained it is necessary to plant on ridges or in beds to prevent drowning the crops during wet weather. The ridges or beds should be as wide and flat as conditions will allow, for narrow, sharp ridges dry out quickly.

PLAN AND ARRANGEMENT OF THE GARDEN.

It would be impossible to give a plan or specific scheme of arrangement for a garden that would suit all requirements, and the plans here presented are only suggestive. Each grower should devise plans to suit his own conditions, but it is hoped that the suggestions given in figures 1 and 2 will be found helpful.

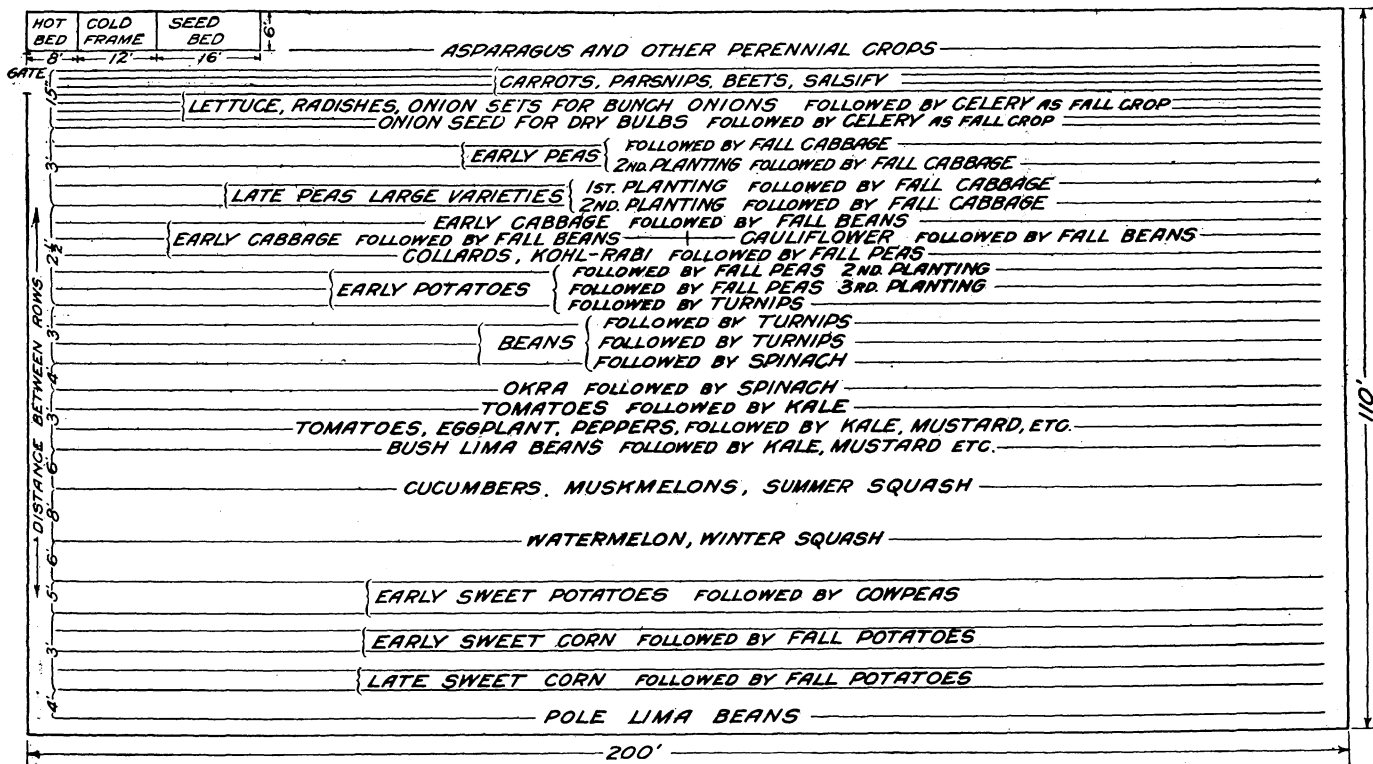


FIG. 1.—Plan of a half-acre garden.

The first consideration in planning the garden is the kind of cultivation to be given. Horse cultivation is recommended whenever possible, and where the work is to be done mainly by means of horse

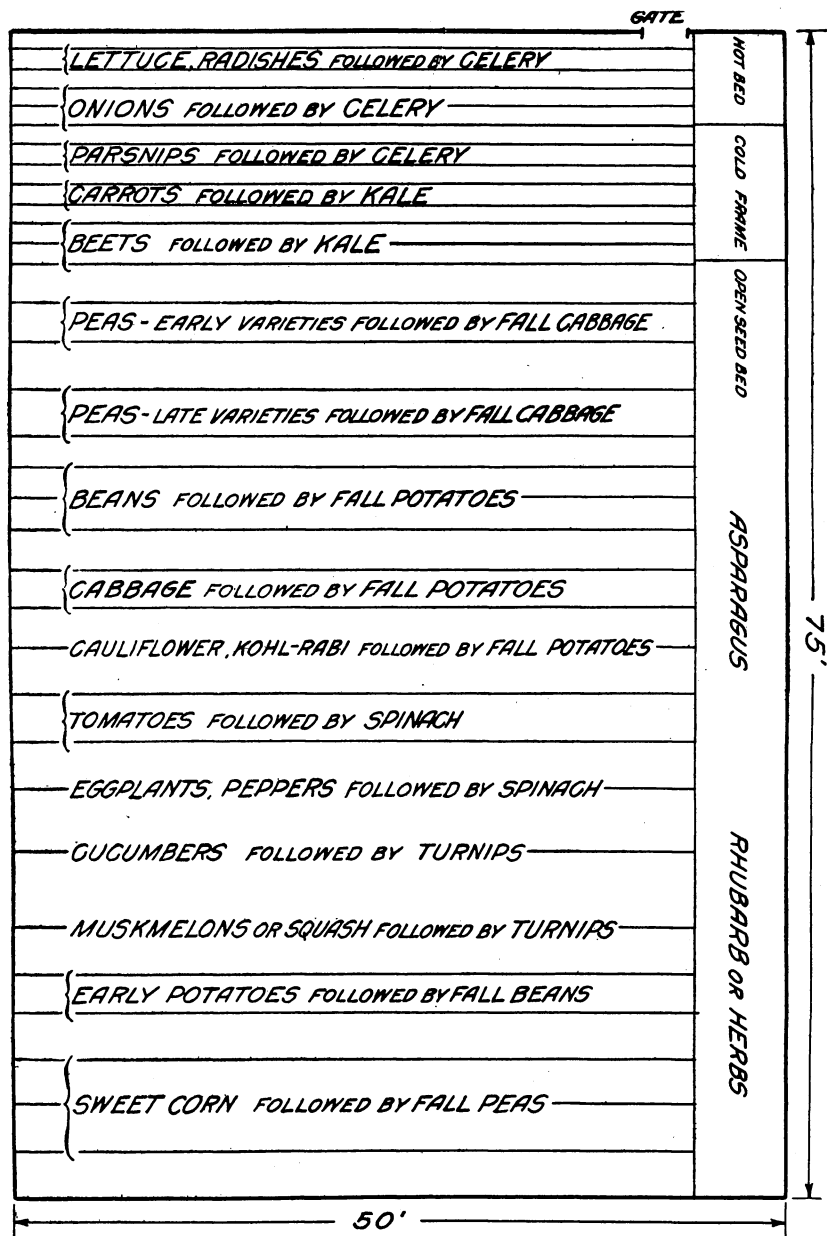


FIG. 2.—Plan of a town or city garden.

tools the garden should be long and narrow with the rows running the long way. The garden should have no paths across the rows, but turning spaces should be left at the ends. For hand cultivation the

rows can be much closer together and may run across the garden. In the plans shown as figures 1 and 2, where the distance between the rows is less than 2 feet, hand cultivation with a wheel hoe is contemplated. If a hand cultivator or wheel hoe is not available, the rows should be at least 2 feet apart, to give sufficient space for the horse cultivator. Straight lines should be followed, no matter what method of culture is used.

The size of the garden depends upon the number of persons to be supplied. One-fourth to one-half an acre is sufficient for an average family and should produce enough vegetables for use throughout the year. By close attention to the rotation of crops, the succession of crops, and interplanting, one-fourth of an acre may be made to supply a family of six. Where land is plentiful it is recommended that a sufficient area be set aside to allow part of the garden to be planted to a soil-improving crop each year.

The location of permanent crops, such as asparagus, rhubarb, and small fruits, should be carefully considered. These crops should be placed at one side, so that they will not be in the way when the garden is plowed.

SUCCESSION OF CROPS.

In planning the location of crops, consideration should be given to the matter of succession, in order that the land may be occupied as large a part of the time as possible. It is not advisable to have a second planting of the same crop or a closely related crop follow the first. Cabbage should not follow cauliflower, Brussels sprouts, mustard, or kale, for many of the same diseases and insects affect all of these crops. Tomatoes, eggplants, and peppers should not follow each other. In the diagrams shown as figures 1 and 2 this point has been considered in planning a succession of crops. In some sections three or four crops can be grown on the same land each year, while in other sections two crops are all that can be grown to advantage. When a crop is harvested early in the season and it is not practicable to plant another vegetable for two or three months, the land may be planted to cowpeas or crimson clover. For example, after a crop of early cabbage it may not be desirable to plant another vegetable crop until late summer or autumn. In this case it would be desirable to sow cowpeas or crimson clover, to be turned under in preparation for the fall crop.

ROTATION OF CROPS.

Rotation of crops is as important in growing vegetables as in growing field crops, and the same principles can be applied. Crop rotation is important in checking diseases and insects and in keeping the soil in good condition. Where diseases are very severe, the same crop should not be planted continuously on the same area. Rotation of crops is one of the safeguards against soil infection.

Land upon which a diseased crop has been grown should not be used for the same or a closely related crop oftener than once in three years. It is usually advisable to rotate crops in such a way that foliage crops (such as cabbage, kale, spinach, and mustard) follow root crops (Irish potatoes, beets, parsnips, carrots, etc.) or those grown for fruits (tomatoes, peppers, melons, etc.). This can be accomplished in a measure by changing the location of crops in the planting plan or by reversing the plan from year to year.

PREPARATION OF THE SOIL.

The soil that is to be used for vegetables should be thoroughly prepared before planting. A deep seed bed is desirable, and when an area that has never been plowed more than 4 inches deep must be used it should be deepened by gradually increasing the depth of plowing for a period of three or four years until the desired depth is attained.

Clay soil should be plowed in the fall if there is no danger of washing, so as to get it in a good mechanical condition before planting time. In the cooler regions of the South freezing will pulverize the soil, while in regions where freezes do not occur the pulverizing must be done by harrowing and cultivation. Sandy loams or soils that contain a large amount of humus should be plowed far enough in advance to allow the soil to settle before planting.

Thorough preparation by plowing, harrowing, rolling, or dragging will lessen the work of cultivation. It is not sufficient to smooth and level the surface; the pulverizing should extend down several inches.

MANURES AND FERTILIZERS.

The soil for vegetable growing should be rich and well supplied with humus. Barnyard or stable manure is the best fertilizer, because it furnishes both plant food and humus. An application of 20 to 30 tons of manure to the acre is very satisfactory, and on some soils this application will need but little reenforcing with commercial fertilizers. The manure should be applied far enough in advance of planting time to allow it to decay. Where coarse manure is used, it should be applied in the fall and turned under, but well-rotted manure should be applied after plowing and should be well mixed with the soil by harrowing. On many soils it is advisable to apply commercial fertilizer, especially phosphates, in addition to the manure. An application of 300 to 600 pounds of acid phosphate to the acre will be sufficient. Sandy soils often need a little additional potash, which can be applied economically in the form of muriate or sulphate of potash at the rate of 200 to 400 pounds to the acre. An application of 100 pounds of nitrate of soda will give the plants a start in the spring before the nitrogen in the manure has become available.

Where manure is not available, some leguminous crop, such as cowpeas, soy beans, vetch, or crimson clover, should be turned under to supply humus and a part of the nitrogen. Additional fertilizing elements can be applied in the form of commercial fertilizers. No definite rule can be given for the kind or quantity of fertilizer to be applied, as this varies with the crop and soil. In most cases it is safe to apply 1,000 to 2,000 pounds of a high-grade fertilizer to the acre. One analyzing 2 to 4 per cent nitrogen, 8 per cent phosphoric acid, and 6 to 8 per cent potash should give good results if the soil is well supplied with humus. This fertilizer may be secured already prepared

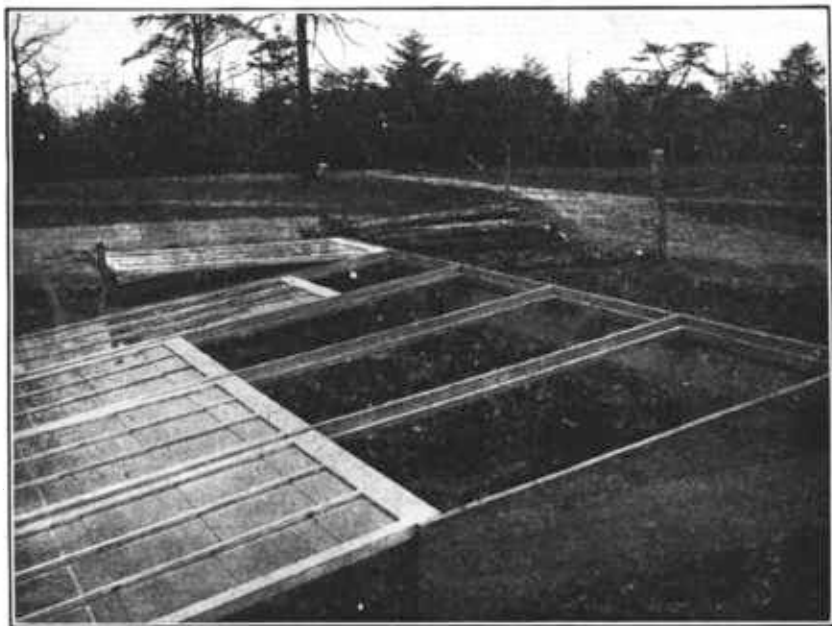


FIG. 3.—A good type of hotbed.

or may be mixed at home. The following combination will make a satisfactory fertilizer for a home garden and may be applied at the rate of 1,000 to 2,000 pounds to the acre:

150 pounds nitrate of soda.
650 pounds cottonseed meal.
1,000 pounds acid phosphate, 16 per cent.
200 pounds muriate or sulphate of potash.

It should be borne in mind that commercial fertilizers will not produce satisfactory results unless the soil is well supplied with humus. In fact, large quantities of fertilizers are justified only where the soil is in good mechanical condition. Many soils in the South that have

been in cultivation for a long time are in a poor mechanical condition and need humus, which can be supplied by turning under green crops or coarse manure.

SEEDS AND PLANTS FOR THE GARDEN.

The seeds for the garden should be secured considerably in advance of the planting season. Secure a catalogue from a reliable seedsman, and after making a plan of the garden select the varieties and quantity of each needed.

In most sections of the South it is desirable to start plants of certain crops before the danger of frost has passed. The simplest method of starting a limited number of plants is by means of a shal-



FIG. 4.—A type of cloth-covered frame used in the South.

low box in a south window of the dwelling. After the plants appear, the box should be turned each day, to prevent the plants drawing toward the light. A more satisfactory method of starting plants is by means of hotbeds or cold frames. A hotbed 6 feet by 6 feet will be large enough for the average-sized garden and can be constructed rather cheaply. In the colder regions of the South some form of heat should be supplied. Fresh manure from the horse stable will be found satisfactory for this purpose. Turn the manure two or three times before placing it in the bed, in order to make it uniform in composition and mechanical condition. Make the excavation for the bed about 18 inches deep and put in 15 to 18 inches of fresh manure, packing it well by trampling. Arrange a frame similar to the one

shown in figure 3 over the manure, so the slope will be to the south. Place 4 or 5 inches of good garden loam over the manure and cover the frame with a hotbed sash or heavy canvas, preferably the former. The manure will heat quite rapidly for the first few days. During that time ventilate the bed frequently, to allow the gases to escape and to lower the temperature. The seeds should not be planted until the temperature goes down to 80° or 85° F. After the seeds have been planted, close attention should be given to the watering and ventilation of the bed. The soil should never be allowed to dry out, but it should not be kept water-soaked. Moisture is necessary for the germination of the seed and for the growth of the plants, but an excess of moisture should be avoided, as it stimulates the development of diseases, especially damping-off. Water should be applied early enough in the day to allow the plants to dry before night. Ventilate the beds during the heated portion of the day, but cover them in time to insure their warming up enough to prevent chilling the plants during the night.

In the lower South, cold frames may be used instead of hotbeds, and canvas or cotton-cloth covers instead of glass. Figure 4 shows a type of frame commonly used in the warmer sections of the South for starting plants.

TRANSPLANTING.

For the best results, plants started in boxes, hotbeds, or cold frames should be transplanted when they reach a height of 1 to 2 inches. Transplanting tends to produce uniform, stocky plants with a well-developed root system. The seedlings may be transplanted to boxes or to the hotbed or cold frame, to stand about 2 inches apart each way. Some growers transplant twice before setting in the open ground. Figure 5 shows two celery plants from the same seedling. The one at the left was transplanted, while that at the right was allowed to remain in the seed bed until time for planting in the garden.



FIG. 5.—Celery plants, showing the effect of transplanting on the root system.

HARDENING OFF.

Plants grown in a house, hotbed, or cold frame should be hardened off before they are transplanted to the garden. This can be accomplished by ventilation and exposure to outdoor conditions during the day in good weather. If the plants are in a hotbed or cold frame, the covers may be removed during the day when the weather is good and replaced toward nightfall. After danger of frosts is past the

covers may be left off at night. By the time the plants are large enough to be transplanted to the garden they should be thoroughly accustomed to outdoor conditions. Such plants usually withstand the transfer to the garden with little check and few losses.

SETTING PLANTS IN THE OPEN GROUND.

Before taking the plants from the bed it should be thoroughly watered and the water allowed to soak into the ground. This will insure a portion of the soil adhering to the roots and will prevent serious wilting or the checking of growth. Take up the plants with a trowel or spade and pack them in boxes or baskets in which to carry them to the field.

The land should be in good condition and everything should be ready for quick operation when planting time arrives. Mark off the rows or dig the holes for the plants just before planting to prevent the drying of the soil. If possible, set the plants on a cloudy day or just before nightfall. When the soil is very dry it is advisable to use a little water in the hole. The water should be applied when the hole is partially filled with soil, and the moist earth should then be

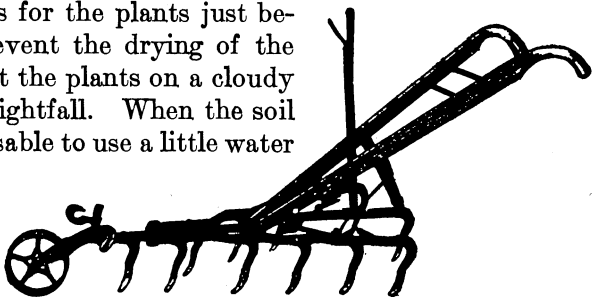


FIG. 6.—Small-tooth horse cultivator.

covered with dry soil to prevent baking. Plants should be set a trifle deeper in the garden than they were in the plant bed. Pack the soil thoroughly around the plants, so as to avoid air spaces.

THE CULTIVATION OF GARDEN CROPS.

Frequent shallow cultivation should be given garden crops. By keeping the surface of the soil stirred a dust mulch is formed, which prevents the loss of moisture through the pores in the soil and keeps down weeds.

The soil should be cultivated as soon as possible after a rain, to break the crust and prevent baking. Sandy soils may be cultivated when quite wet, but clay soils should not be stirred when sticky. Too much emphasis can not be placed on the matter of thorough cultivation. If the work is properly done at the right time there will be little difficulty in controlling weeds.

In cultivating the garden, small-tooth cultivators should be used to prevent ridging or furrowing. Figure 6 shows a good type of horse cultivator for use in the garden. A turnplow or sweep should not be

used for cultivation unless the land becomes so weedy that cultivators will not do the work. Frequent cultivation kills the weeds between the rows before they become large, but hand work will be necessary to keep the soil stirred between the plants and to keep down weeds in the row. A good hand cultivator similar to the one shown in figure 7 is a valuable adjunct to the vegetable garden.

ASPARAGUS.

Asparagus should be grown in every home garden where it will thrive, because it is one of the earliest vegetables and is a valuable addition to the spring diet. The soil for asparagus should be made quite rich by the application of partly rotted manure before the plants are set. As soon as danger from hard frosts is over, the seeds of asparagus may be sown in the rows where the plants are to remain. Soaking the seed in hot water for an hour or two before planting will hasten germination.

The seedlings should be thinned to stand 15 inches apart in the row. Quicker results can be secured, however, by buying roots from some seedsman or dealer. The roots may be planted in the autumn or early

spring. Before setting the plants, the soil should be loosened deeply by spading or by the use of a subsoil plow. When horse cultivation is to be used, set the

plants 15 inches apart in rows $3\frac{1}{2}$ to 4 feet apart. When hand cultivation is to be used, the roots may be set in a solid bed 1 foot apart each way. Cover the roots to the depth of 4 or 5 inches. The bed should receive a dressing of manure or fertilizer each year, preferably in the autumn.

No shoots should be removed the first year the plants are set in the permanent bed, and the cutting season should be short the second year. After the bed is well established, with proper care and fertilizing it should last indefinitely. During the cutting season, all of the shoots, even those too small for use, should be removed. After this, the tops should be allowed to grow until late in the season, when they should be removed and burned and the soil between the rows cultivated. Apply a dressing of manure after cultivation and allow the manure to remain on the bed.

Varieties recommended: Palmetto, Conover's Colossal, and Giant Argenteuil.

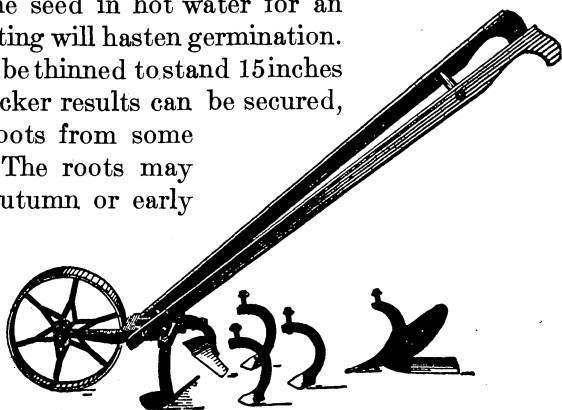


FIG. 7.—Wheel hoe.

BEANS.

Beans will not withstand much cold, so they should not be planted until danger of frost is past and the ground begins to warm up. The first planting should be made as soon as the ground is reasonably warm, and other plantings may be made at intervals of ten days or two weeks until hot weather sets in. Beans for the fall garden should be planted in late summer, and successive plantings may be made at the intervals suggested until about eight weeks before time for the first frost in the autumn.

Bush beans should be planted to stand 3 or 4 inches apart in rows 30 inches apart where horse cultivation is to be used. For hand cultivation, 20 to 24 inches between the rows will be satisfactory. Among the best varieties of bush beans are the Stringless Green Pod, Refugee, Hodson's Kidney Wax, Currie's Rustproof Wax, and Wardwell's Kidney Wax.

Lima beans, both pole and bush, should be grown in the garden. These should be planted after all danger of frost is over and the soil is warm. Plant the pole beans 8 to 10 seeds in a hill and thin to 3 or 4 after the plants become established. The hills should be 4 or 5 feet apart. For bush Lima beans, plant 5 or 6 inches apart in rows 30 to 36 inches apart.

When planting beans of any kind the seed should not be covered over 2 inches, and on heavy soils they should not be covered more than $1\frac{1}{4}$ to $1\frac{1}{2}$ inches.

Varieties recommended: Seibert's Pole Lima, Carpinteria Lima, and King of the Limas are good varieties of pole Lima beans, and Landreth's Bush Lima, Dreer's Bush Lima, and Henderson's Bush Lima are good varieties of the bush type.

For further information on bean growing, read Farmers' Bulletin 289, entitled "Beans."

BEETS.

Beets can be planted as soon as danger of frost has passed, even before the ground has become warm. Sow the seeds in drills 14 to 18 inches apart, covering to the depth of about 1 inch. As soon as the plants are well up, thin them to stand 3 to 4 inches apart. Make two or three plantings, so as to have a continuous supply of young, tender beets throughout the season. In many sections of the South beets may be left in the ground through the winter, to be pulled when wanted.

Varieties recommended: Crosby's Egyptian, Bassano, Early Eclipse, and Early Blood Turnip.

CABBAGE.

In Florida and the Gulf coast region of the other Southern States cabbage seed may be sown in the open any time from September to

January. Along the Atlantic coast, from Charleston, S. C., to Florida, seed may be sown in the open in October. In all other sections of the South hotbeds or cold frames should be used for starting the plants. A canvas-covered frame will be satisfactory, except in the colder regions of the South, where hotbeds should be used. The seed should be planted in the frames in November or December, or about eight weeks before time for planting in the open. Cabbage will withstand a hard freeze if the plants have been hardened off before they are planted in the field.

For spring and early-summer cabbage the following varieties are recommended: Jersey Wakefield, Charleston Wakefield, Allhead Early, and Succession. The Copenhagen Market, a new variety, has given excellent results in many localities and is well worthy of a trial.

In most sections of the South it is not advisable to grow cabbage during midsummer, but a fall crop should be grown. The same varieties may be grown in the autumn as in the spring, but it is usually desirable to plant larger varieties, such as Flat Dutch or Danish Ball Head. Seed for the fall crop should be planted in a cool location in late summer and the plants set out as soon as they reach the proper size and the soil contains sufficient moisture to start growth. Cabbage plants should be set 14 to 18 inches apart in rows 30 to 36 inches apart. The earlier varieties, which grow small heads, are usually set closer than the later ones.

For further information on cabbage growing, read Farmers' Bulletin 433, entitled "Cabbage."

CARROT.

The soil and cultural requirements of carrots are practically the same as for beets. Carrot seed, however, should not be planted so deep as beet seed, and the plants can be allowed to grow closer together in the row. Carrots may be dug in the autumn and stored in banks or cellars, or they may be left in the ground to be harvested as needed.

Varieties recommended: Half-Long Scarlet, Early Scarlet Horn, and Chantenay.

CAULIFLOWER.

Cauliflower thrives best on a rich, moist soil. The culture of this crop is about the same as for cabbage, but it will not withstand as much frost. In order to secure bleached heads it is necessary to protect them from the sun. The usual practice is to tie the leaves together over the heads.

Cauliflower is often prepared for the table in the same way as cabbage. One of the best methods of preparing cauliflower is to boil the whole head in salt water (1 teaspoonful of salt to 1 quart of water) until it is tender. Drain off the water, place the cauliflower in a

baking dish, and pour over it a white sauce made as follows: Melt 2 tablespoonfuls of butter and rub into it 2 tablespoonfuls of flour; add 1 cup of cold milk; stir until smooth; boil the milk with the flour and butter until thick. Pour the white sauce over the cauliflower, sprinkle with 2 tablespoonfuls each of grated cheese and buttered crumbs, and brown in an oven.

Varieties recommended: Early Snowball and Dwarf Erfurt are the varieties of cauliflower most commonly grown in the South.

CELERY.

In the lower South celery is grown as a fall crop, as it will not mature during hot weather. The seed is sown in a cool, shady place in late summer and the plants set out in the autumn as soon as the soil becomes moist. The seed should be sown in rows and covered lightly (not more than one-eighth of an inch) or sown broadcast and covered with burlap, straw, or some other material, to prevent the loss of moisture while the seed is germinating. It will be necessary to water the seed bed often during dry weather.

In the upper South celery may be grown in the spring or in the autumn. As a spring crop, the seed should be started in a hotbed during the winter so that the plants may mature before midsummer. Celery does not bleach well in hot weather, but rots when banked or boarded for bleaching.

Set the celery plants 6 inches apart in rows 3 feet apart for horse cultivation, or 18 to 24 inches apart when hand cultivation is to be employed.

Celery requires a deep, rich, moist soil and frequent shallow cultivation. When grown as a fall crop celery may be planted after some other crop, such as peas, beans, cabbage, lettuce, or radishes. When the celery plants are nearly grown a little soil should be drawn around the base to hold the plants in place. About two weeks before they are wanted for the table the bleaching should begin. Soil, boards, or paper may be used for bleaching, but soil should be employed only when the weather is cool. When soil is to be used for bleaching, the rows should be 4 feet apart. Some quick-maturing crop could be grown between the rows of celery to make use of the space up to time for bleaching.

Varieties recommended: Golden Self-Blanching, Columbia, and Giant Pascal.

For further information on celery growing, read Farmers' Bulletin 282, entitled "Celery."

COLLARDS.

A group of nonheading cabbages differing slightly from kale, but withstanding summer heat better than either kale or cabbage, is extensively grown throughout the South under the name of Georgia

collards. Collards do not make a true head, but form a rosette of leaves, which are very tender. The culture and uses of this plant are the same as those of cabbage and kale.

CORN, SWEET.

Sweet corn should be planted on rich land and cultivated the same as field corn. Plant the seed as soon as the soil is warm in the spring, and make successive plantings every two or three weeks until late summer. The same results can be obtained to some extent by planting early, medium, and late varieties. Plant the seeds about 2 inches deep in drills 3 feet apart, and thin to a single stalk every 10 to 14 inches.

Sweet corn, when grown in the South, passes so quickly from the milk to the dough stage, that care should be exercised to gather the crop just at the right time, in order to secure the most satisfactory results. The flavor of sweet corn depends upon the stage of maturity and the method of handling the product from the plant to the table. Sweet corn loses its sugar content very rapidly after being removed from the stalk. It should, therefore, be picked only a few hours, and preferably a few minutes, in advance of the time when it is to be placed in the pot.

Varieties recommended: For early corn Golden Bantam and Adams Early are suggested, and for medium and late varieties Black Mexican or White Mexican, Country Gentleman, and Stowell's Evergreen. The last-named variety has the largest ears and is the most productive.

CUCUMBERS.

The soil for cucumbers should be rich, and it is a good plan to apply well-rotted manure under the rows or hills. If planted in rows, open the furrow and scatter the manure along the furrow, turning fresh soil over the manure before planting the seeds. If the seeds are planted in hills, confine the application of manure to the area occupied by the hills.

As cucumbers are easily injured by cold, it is not advisable to plant until all danger of frost is over and the ground has begun to warm up. For very early cucumbers the seeds should be planted in a hotbed in old strawberry boxes or plant bands or directly in the soil of the bed. By starting the plants in hotbeds the cucumbers will be ready for the table two or three weeks earlier than if started in the open. For the main crop, drill the seed in rows 5 feet apart, and after the plants reach a height of 3 or 4 inches thin them to stand 12 to 18 inches apart in the row, or plant the seeds in hills 4 feet apart each way and thin to two or three plants to the hill.

Cucumbers should be given frequent shallow cultivation until the vines fill most of the space between the rows; after this very little

attention will be needed, except to pull out any weeds by hand. Do not allow any fruit to ripen on the vines until the end of the picking season, as new fruits will not form while older ones are ripening.

Young cucumber plants are often destroyed by the cucumber beetle. It is possible to protect the plants by covering them with small wooden frames over which mosquito netting has been stretched. Air-slaked lime sprinkled over the small plants is an added protection against the cucumber beetle.

Varieties recommended: White Spine, Davis Perfect, and Emerald.

For further information on cucumber growing, read Farmers' Bulletin 254, entitled "Cucumbers."

EGGPLANT.

The plants for this crop should be started in a hotbed or in a box in the house about two months before time for planting in the field. The plants should not be set in the field until after all danger of frost has passed and the ground has become quite warm. Set the plants 18 to 24 inches apart in rows 3 feet apart, and give clean, shallow cultivation to keep the plants growing rapidly. A dozen good, healthy plants will supply enough fruit for the average-sized family throughout the season.

Eggplant may be used in several ways, one of which is the following: Peel and cut into slices one-fourth to one-half inch thick and soak in salt water for an hour; boil until tender; then coat with cracker crumbs or flour and fry in butter or fat. Another method is to steam or bake the eggplant whole, the pulp being eaten from the shell with salt, pepper, and butter.

Varieties recommended: New York Improved Purple, Black Beauty, and Florida High Bush.

GARLIC.

Garlic is propagated by separating the bulbs into the small bulblets, or cloves, and planting these separately in rows 12 to 14 inches apart and from 3 to 4 inches apart in the row, either in the autumn or spring. In other respects the cultivation is the same as for onions. The mature bulbs are pulled and left on the ground until the tops are dry, when they are gathered, braided together, and hung in a shed to cure. Garlic is used for flavoring purposes.

KALE.

Kale is a very hardy crop and can be grown in the open during the autumn and winter in practically all sections of the South. Sow the seed early in the autumn in drills 18 inches apart for hand cultivation and 30 inches apart for horse cultivation. Thin the plants to stand 4 or 6 inches apart in the row. A spring crop of kale should

be planted to furnish fresh, tender greens after the winter kale has become tough. Seed for the spring crop may be sown as soon as the soil can be conveniently worked.

Varieties recommended: Dwarf Curled, Tall Scotch, and Siberian.

KOHL-RABI.

Kohl-rabi belongs to the same class as cabbage and cauliflower, but does not resemble either. The edible portion is the swollen stem, which resembles a turnip, but which is formed above ground. Kohl-rabi should be grown both in the spring and in the autumn. Sow the seed in drills and thin the plants to 6 inches apart in the row. The rows should be 18 inches apart for hand cultivation and 30 to 36 inches apart for horse cultivation. The fleshy stems should be used while fresh and tender, as they become tough and stringy with age. Kohl-rabi may be prepared and cooked the same as turnips or prepared with cream sauce, as described for cauliflower.

Variety recommended: White Vienna.

LETTUCE.

Lettuce thrives best during cool weather, so it should be planted in the spring and autumn. In order that the leaves or head may be crisp, the crop should be forced and successive plantings made ten days or two weeks apart. In the lower South lettuce can be grown in the open, and in the upper South, in hotbeds or cold frames throughout the winter.

When grown in the garden the seeds should be sown in rows 14 to 16 inches apart and the plants thinned to the desired distance. The heading type should be thinned to stand 8 inches apart in the row, but with the loose-leaf type the plants may be grown close together and thinned as needed for the table. For a very early crop, start the plants in the hotbed or cold frame and transplant the young plants to the garden as soon as hard freezes are over.

Lettuce planted in the autumn may be left in the ground over winter in many sections of the South. Give the plants frequent shallow cultivations with hand tools.

Varieties recommended: Grand Rapids or Black-Seeded Simpson for loose-leaf lettuce, and Big Boston, Hanson, and California Cream Butter for head lettuce.

MELONS.

Muskmelon.—The culture of the muskmelon is the same as for the cucumber, except that the plants are usually given more space. Plant 8 to 10 seeds in a hill, spacing the hills 6 feet apart each way. After the plants become established, thin out all but four of the best ones. Another method is to sow in drills 6 feet apart and thin to single plants 18 to 24 inches apart.

Varieties recommended: Rocky Ford, Netted Gem, Emerald Gem, Eden Gem, Jenny Lind, and Paul Rose.

Watermelon.—The cultivation of the watermelon is the same as for the cucumber and muskmelon, except that the plants require more space. Plant watermelon seed in rows 8 to 10 feet apart and thin to single plants 3 feet apart, or plant in hills 8 to 10 feet apart each way.

Varieties recommended: Kleckley Sweets, Florida Favorite, Georgia Rattlesnake, and Tom Watson.

MUSTARD.

Mustard is used largely for greens and can be grown in early spring and late autumn. The seeds for the spring crop should be sown as soon as the soil can be put into condition. For the fall crop, sow the seeds in late summer or early autumn in drills about 1 foot apart. As the plants require but a short time in which to reach edible maturity, frequent sowings should be made.

Varieties recommended: Giant Ostrich Plume and Large-Leaved Curled.

OKRA, OR GUMBO.

Sow seeds of okra in the open after danger of frost is over and the soil becomes quite warm. The rows should be 3 to 4 feet apart for dwarf varieties and 4 to 5 feet for the tall kinds. Sow the seed a few inches apart in the row and thin the plants to 18 inches to 2 feet apart. Give frequent shallow cultivation until the plants are nearly grown.

The pods are the part of the plant used for food and should be gathered while still crisp and tender. If the pods are removed so as to allow none to ripen, the plants will continue to bear until killed by frost.

Varieties recommended: White Velvet, Dwarf Green Prolific, Perkins Mammoth, Long-Podded, and Lady Finger.

For further information on okra, read Farmers' Bulletin 232, entitled "Okra: Its Culture and Uses."

ONIONS.

For very early bunch onions it is the common practice to plant sets in drills 12 to 14 inches apart and 2 to 3 inches apart in the row. The sets may be put out in the autumn or as early in the spring as the land can be prepared. In the cooler regions of the South the sets will need some protection if planted in the fall, and hay or straw may be used to keep them from freezing.

For dry onions, sow the seed thickly in drills about 12 to 14 inches apart in the spring as soon as danger from hard frosts is over. For early bulbs the seed may be planted in a hotbed or cold frame and the young plants transplanted to the open when conditions are

favorable. Plants 4 or 5 inches high are of good size for transplanting.

Onions require frequent shallow cultivation and it may be necessary to resort to hand weeding. When the tops begin to die and the bulbs are full grown, the onions should be pulled and left in the field for a few days to dry. Then the tops should be clipped off and the bulbs placed in crates or bags and stored in a well-ventilated place to cure.

Early green onions may also be produced from the Multiplier or Potato varieties planted in the autumn. The large bulbs of these onions contain a number of "hearts," or buds, and if planted will produce a number of small onions. The small onions have but one "heart" and will produce large bulbs. A few large bulbs should be planted each year to produce sets for fall planting.

The Top, or Tree, onion produces a number of bulblets on top of the stem. These small bulbs can be planted in the autumn and will produce onions the following spring.

Varieties recommended: Southport White Globe, Southport Red Globe, Southport Yellow Globe, Danvers, Red Wethersfield, Australian Brown, and Prize Taker. In some sections of the South the Creole is grown and the Louisiana, or Red Creole, is a popular variety. The Bermuda is a good type of mild-flavored onion and is desired by many. The important varieties of Bermuda are Crystal Wax, White Bermuda, and Red Bermuda.

For additional information on onion growing, read Farmers' Bulletin 354, entitled "Onion Culture."

OYSTER PLANT (See SALSIFY).

PARSLEY.

Parsley is used mainly for garnishing meats, but can be used for flavoring soups and other foods. Sow parsley seed thickly in a drill or sow broadcast and cover lightly, either in the autumn or early spring. A space a yard square will be sufficient for parsley.

Varieties recommended: Plain Leaved and Double Curled.

PARSNIP.

Sow parsnip seed in the spring as soon as danger of hard frosts is over, in drills 14 to 16 inches apart. Thin the plants to stand 3 inches apart in the rows. The cultivation of parsnips should be about the same as for beets and carrots. A crop may be planted in late summer for winter use, and the roots may be left in the ground through the winter or until needed, as freezing is believed to improve the flavor of parsnips. If it is desired to plow the garden before the parsnips are disposed of, they may be dug and stored in a cool place or buried in banks or pits.

Parsnips may be boiled and eaten with butter, or parboiled and baked with meats the same as potatoes.

Varieties recommended: Hollow Crown and Sugar.

PEAS.

Garden peas, sometimes called English peas, are not injured by light frosts, so should be planted as soon as the soil can be put in order in the spring. The first plantings should be of small-growing, quick-maturing varieties, such as Alaska, First and Best, and Gradus, which do not require supports. These varieties should be followed by the large wrinkled type of peas, such as Champion of England, Telephone, and Prize Taker. The large-growing varieties should be supported on brush, as shown in figure 8, on strings attached to



FIG. 8.—Pea vines supported on brush.

stakes driven in the ground, or on wire netting. In order to have a continuous supply of peas, plantings should be made every 10 days or two weeks until warm weather. Peas should be planted in late summer and autumn for the fall garden, for which the early varieties are more desirable than the late ones.

Peas should be planted about 2 to 3 inches deep in rows 3 to 4 feet apart. Some gardeners, however, follow the practice of planting in double rows 6 inches apart with the ordinary space of 3 to 4 feet between these pairs of rows. This is a good practice with varieties requiring support, as the supports can be placed in the narrow space between the rows.

Varieties recommended: Alaska, First and Best, Gradus, Telephone, Champion of England, and Prize Taker.

PEPPERS.

Seeds of peppers should be sown in a hotbed or in a box in the house about eight weeks before time for setting the plants in the garden. The plants are tender and should not be transplanted until the ground is warm and all danger of frost is past. Set the plants 15 to 18 inches apart in rows $2\frac{1}{2}$ to 3 feet apart. The cultivation and treatment of peppers should be the same as that of tomatoes and egg-plants. There is a large number of varieties of peppers, including the sweet kinds and the hot peppers.

Varieties recommended: Ruby King, Chinese Giant, Sweet Spanish, and Bell or Bull Nose, of the sweet peppers; Long Red Cayenne, Tabasco, and Red Cluster, of the hot types.

POTATOES.

Irish or white potatoes.—A small area of early potatoes should be grown in the garden, but the main crop should be grown elsewhere. Early potatoes should be planted as soon as the ground can be prepared to good advantage. In Florida, potatoes are usually planted in December, while in other sections of the lower South they are planted in January. In the upper South early potatoes are usually planted in February, but in the extreme northern portion of the South they are not planted until March. As it is difficult to keep potatoes through the summer, a fall crop should be grown. A common practice in some parts of the South is to plant potatoes from the first crop as soon as they are dug. In the lower South this method can be followed to advantage. Another method is to bed the potatoes on a little loose soil in a cool, shady place, covering the bed with litter or soil and moistening it thoroughly. As soon as the tubers sprout they are planted in the field for the late crop.

Potatoes are planted 12 to 14 inches apart in rows $2\frac{1}{2}$ to 3 feet apart and covered to the depth of about 4 inches. Potatoes planted during hot weather should be covered 6 inches deep unless they have been sprouted before planting. The furrows are usually opened with a 1-horse turnplow, or lister, and the potatoes dropped, one piece in a place, in the bottom of the furrow. As it requires two or three weeks for potatoes to come up, it is important that they be cultivated as soon as the row can be followed. If a crust forms before the potatoes come up, a spike-tooth harrow or weeder should be run over the ground to loosen the surface of the soil. Harrow-toothed cultivators should be used for the main cultivation, but at the last cultivation the soil may be worked up around the plants to hold them erect and to protect the tubers from the sun.

After digging the early potatoes they should be kept in a cool, dry place during the hot weather of summer. In the lower South it is

better to grow a fall crop rather than to try to keep the spring crop through the summer and winter. Fall-grown potatoes can be kept in a dry cellar, in a pit, or in any building where the temperature can be controlled. Irish potatoes keep best in a cool temperature, but should not be allowed to reach the freezing point. It is best not to allow the temperature to fall below 36° F.

Varieties recommended: Irish Cobbler, Bliss Red Triumph, and Bliss White Triumph are good early potatoes. Where only one variety is to be grown, the Irish Cobbler is recommended. The same varieties may be grown for the fall crop, or the Green Mountain, which is a late variety, may be used.

Sweet potatoes.—The sweet potato is not usually handled as a garden crop in the South, but it is advisable to have a few plants in the garden for early summer use. On land that is not thoroughly drained sweet-potato plants should be set on ridges which are thrown up by means of a plow. Two or four furrows are usually thrown together, and leveled off with a light drag. The ridges should be broad, as narrow sharp ridges dry out quickly. The fertilizers recommended for general garden treatment will be found satisfactory for sweet potatoes. The roots that are too small for marketing are usually used for seed. For an early crop the roots should be bedded in a hotbed five or six weeks before it will be safe to set the plants in the field. As the plants are easily injured by cold, they should not be transplanted until danger of frost has passed. For the general crop in the lower South, select a protected location, preferably on the south side of a building or fence, and bed the roots in the open. A common method is to make an excavation 6 inches deep and of sufficient size to accommodate the roots to be bedded. Place in this a layer of sand or loose soil, on which to bed the sweet potatoes. Put the roots close together, but do not allow them to touch, and cover them with sand or loose soil 1 to 2 inches deep. Soil on which sweet potatoes have been grown should not be used for the seed bed. Ten bushels of sweet potatoes will furnish enough slips to plant an acre. From these slips, if set out early, may be taken enough vine cuttings to plant 7 or 8 acres. Vine cuttings may be planted as late as July in the upper South and as late as August in the lower South. They will produce as large crops as slips, with less danger from the diseases which affect the roots.

Sweet potatoes should be dug on a bright day when the soil is dry. The time for digging varies in different sections, but the potatoes should be dug before there is any danger of hard frosts. When grown on a small scale, sweet potatoes may be dug with a spading fork. Great care should be taken not to bruise or injure the roots in handling. After digging, the roots should lie exposed for two or three hours to dry, after which they should be placed in a

warm, well-ventilated room. The temperature during the curing period of about 10 days should be about 80° to 90° F. After the curing period the temperature should be lowered gradually to about 55° F. and held at that point during the remainder of the storage period. A small crop may be cured near the kitchen stove and afterwards stored in a dry room where there is no danger of their becoming chilled. Handle sweet potatoes as little as possible.

Varieties recommended: Pumpkin Yam, Dooley, Nancy Hall, Triumph, and Southern Queen. Where a dry-fleshed potato is desired, Improved Jersey, Big-Stem Jersey, and Triumph are recommended.

For further information on sweet potatoes, read Farmers' Bulletins 324 and 548, entitled "Sweet Potatoes" and "Storing and Marketing Sweet Potatoes," respectively.

RADISH.

The radish is quite hardy and may be grown in the open all winter in the lower South and in cold frames in the upper South. Sow the seed in the open ground as soon as danger of hard frosts is over, or in cold frames whenever space is available. In the open, sow the seed in drills 12 to 15 inches apart and thin the plants to 1 inch apart. Successive plantings should be made every ten days or two weeks until hot weather comes and again in the autumn when the weather begins to get cool.

Varieties recommended: There are three types of radishes—turnip shaped, olive shaped, and long. Of the turnip shaped, the best varieties are the Scarlet Globe and Scarlet Turnip. The best of the olive-shaped sorts are the French Breakfast and Early Scarlet. The Long Scarlet Chartier, Long White Spanish, and Icicle are the best varieties of the long type.

RHUBARB.

This crop can be grown in the upper South, but can not be grown satisfactorily in the lower South. For home use it is best to buy roots from a dealer rather than to grow plants from seed. Ten to twelve good hills are sufficient for the average family.

Set the roots 3 to 4 feet apart along the garden fence and manure heavily. The treatment suggested for asparagus is satisfactory for rhubarb. Do not allow the plants to go to seed.

SALSIFY, OR VEGETABLE OYSTER.

Sow seeds of salsify at the same time and in the same manner as those of parsnips and carrots. An ounce of seed will plant a 100-foot row and should be sufficient for an average family. After the plants are up, thin them to about 2 inches apart in the row. Salsify may be dug and stored the same as parsnips and carrots or left in the soil

until needed. It is a biennial, and if the roots are not dug they will produce seed the second season.

Salsify deserves more general cultivation, as it is one of the most desirable root crops. It may be used in about the same way as parsnips. It is sometimes boiled, rolled in cracker crumbs, and fried in butter. Salsify when fried or used for making soup has a decided oyster flavor, from which it gets the name vegetable oyster.

The Sandwich Island is the variety commonly grown.

SPINACH.

Spinach is one of the best crops grown for greens and should be found in every home garden. It can be grown in the open throughout the autumn and winter in all sections along the coast from Norfolk, Va., south and in the lower tier of Southern States. In the colder regions of the South it may need a little protection during the coldest weather. Two or three inches of hay, straw, or leaves will be a satisfactory protection, or the winter crop of spinach in the colder regions of the South may be grown in canvas-covered frames. The seed planted in the autumn will furnish greens through the winter and early spring.

Sow the seeds of spinach in drills 12 to 15 inches apart at the rate of 1 ounce to 100 feet of row. Three or four ounces of seed will produce enough greens for the average family. In gathering, the entire plant is removed. The large plants are selected first, and the smaller or later ones are thus given room to develop.

The Savoy is the variety most commonly grown.

SQUASH.

There are two types of squashes, the bush varieties and the running varieties. The bush varieties should be planted in hills 4 feet apart each way and the running varieties 8 to 10 feet apart each way. Squashes are prolific, and a supply for the average family will ordinarily be furnished by five or six hills of each sort. Squash seed should not be planted until after danger of frost is over and the soil is quite warm. The cultivation and care of squashes should be the same as that given cucumbers or muskmelons.

The summer squash is prepared for the table in several ways. It may be boiled and eaten with butter, pepper, and salt, or it may be parboiled and then fried. It may also be sliced without boiling, soaked in water with a little salt, and then fried in egg and bread crumbs or cracker crumbs, like eggplant. Winter varieties are stewed or steamed, to be served with butter and salt, or are prepared in the same way for pie filling. They may also be baked and served in the shell or the flesh may be scraped out after baking and served with butter and salt.

Varieties recommended: The varieties of summer squash commonly grown in the South are Pattypan, Summer Crookneck, and Vegetable Marrow. Of the winter squashes, the Delicious and Hubbard are among the best.

TOMATOES.

To get a crop of early tomatoes the seed should be started about eight weeks before time for setting the plants in the field. In the lower South the plants can be grown in cold frames covered with canvas or cotton cloth, but in the upper South a hotbed should be employed. When only a few plants are needed the seed may be sown in a shallow box in the house. For the best results in growing tomatoes the young plants should be transplanted as soon as they reach a height of $1\frac{1}{2}$ to 2 inches. Transplant these plants to stand 2 inches apart each way in a hotbed, cold frame, or box in the house. When the plants begin to crowd, it is a good plan to transplant them to flower pots, plant bands, old strawberry boxes, or tin cans from which the bottoms and tops have been melted.

Tomato plants should be set in the open as soon as danger of frost has passed. If the plants are to be pruned to one or two stems and tied to stakes, they should be set 18 inches apart in rows 3 feet apart. If the plants are not pruned or staked, they may be planted 3 feet apart in rows 4 feet apart. It is advisable, however, to prune and train to stakes, especially for the early crop, as plants so treated will be healthier and more easily cultivated and will produce fruit which is earlier and more uniform in size and shape than that produced by plants which have not been trained and pruned. Soon after setting the plants in the field a stake should be driven near each plant, to which it may be tied. Care should be exercised to tie the plant so that it will not be injured by the string. A good plan is to loop the string around the stake and tie it under a leaf stem. Go over the patch once every week or ten days and remove all shoots starting in the axils of the leaves.

Varieties recommended: For early tomatoes, Earliana or Chalk's Early Jewel is recommended, preferably the former. For medium and late varieties, the following are suggested: Greater Baltimore, Red Rock, Globe, Beauty, Acme, and Stone. The Stone is usually preferred for canning. For fuller information on tomato culture, see Farmers' Bulletin 642, entitled "Tomato Growing in the South."

TURNIPS.

The turnip should be grown both as a spring and as a fall crop. For the spring crop, plant as early as the condition of the soil will permit, and for the fall crop sow the seed in late summer or early autumn. Sow the seed thickly in rows 15 to 18 inches apart, and as the plants reach a height of 4 or 5 inches begin thinning, using

the young plants for greens. For good roots thin the plants to about 3 inches apart in the row. Cultivate turnips the same as carrots and parsnips. Turnips may be left in the ground until needed for the table, pulled and stored in a cellar, or buried in banks or pits.

Varieties recommended: Purple Top Globe, White Globe, Seven Top, White Milan, and Yellow Aberdeen.

Rutabagas.—Large quantities of rutabagas are shipped from the Northern States and Canada into the Southern States each year. While this crop is not commonly cultivated in the South, it may be grown as a fall and winter crop to very good advantage.

Rutabagas are planted the same as turnips, except that they require more room and a longer period of growth.

The Purple Top is the most common variety of rutabaga.

SUMMARY.

(1) In nearly all sections of the South there is a scarcity of fresh vegetables during a large part of the year.

(2) A well-kept garden will yield a return eight to ten times as great as that from an equal area devoted to cotton or to other general farm crops.

(3) The value of vegetables in the diet is a great deal more than the mere food or money value, as they furnish a large part of the essential salts which are necessary to the well being of the human system.

(4) The location selected for the garden should be as near the house as possible. Practically any type of soil can be used for vegetables, but a sandy loam is to be preferred.

(5) Good drainage is of prime importance. If the land has not good natural drainage, artificial drainage should be employed.

(6) Where cultivation is to be done by means of horse tools the garden should be long and narrow, with the rows running the long way of the garden.

(7) The garden should be laid off in straight rows for either horse or hand cultivation.

(8) An area of one-fourth to one-half acre in garden crops should be sufficient for a family of average size.

(9) The garden should be occupied as large a part of the year as possible. As soon as one crop is removed, another should be planted, so as to have a succession of crops coming on all the time.

(10) A good system of rotation should be followed in the home garden, in order to keep diseases and insects in check and to keep the soil in good condition.

(11) The soil for the garden should be thoroughly prepared before planting vegetables. A deep soil is desirable, but the depth should be increased gradually.

(12) Barnyard or stable manure is the best fertilizer for vegetable growing, as it furnishes both plant food and humus. Where manure is not available, green crops, such as cowpeas, soy beans, vetch, or crimson clover, should be turned under to supply humus and part of the nitrogen. Commercial fertilizers can be employed to furnish most of the plant food, but without humus in the soil the fertilizer will be of little value.

(13) For early crops of cabbage, cauliflower, tomatoes, peppers, eggplant, etc., the seed should be started in a hotbed or cold frame, or in a box in the dwelling. In most sections of the South a cold frame will be satisfactory, but in the colder regions a hotbed should be used.

(14) In order to secure good stocky plants with large root systems, the seedlings should be transplanted at least once before setting in the garden. The plants should be set 2 inches apart each way in a box, hotbed, or cold frame.

(15) Before setting plants in the open they should be hardened off, to prevent a serious check to growth. This can be accomplished by exposing the plants to outside conditions during the day in mild weather and finally leaving them uncovered at night when there is no danger of frost.

(16) Thoroughly soak the plant bed before removing the plants, so as to have as much soil adhere to the roots as possible.

(17) In setting the plants in the garden, thoroughly pack the soil around the roots. When the soil is dry, it is advisable to apply a little water around the roots. As soon as the water has soaked in, the moist soil should be covered with dry earth to prevent baking.

(18) Give frequent shallow cultivation with small-tooth cultivators. A sweep or turnplow should not be used unless the land becomes so weedy that cultivators will not do the work.

GARDENERS' PLANTING TABLE.

Quantity of seeds and number of plants required for 100 feet of row, depths of planting, and distances apart for rows and plants.

Kind of vegetable.	Required for 100 feet of row.		Depth for plant- ing seed.	Distance apart.		
	Seed.	Plants.		Rows.		Plants in the row.
				Horse cultivation.	Hand cultivation.	
Asparagus.....	1 ounce.....	60 to 80	<i>Inches.</i> 1 to 1½	<i>Feet.</i> 3 to 4	2 feet.....	15 inches.
Bean:						
Bush.....	1 pint.....		1½ to 2	2½ to 3	.....do.....	3 to 4 inches.
Pole Lima.....	½ pint.....		1½ to 2	4	3 feet.....	3 to 4 feet.
Bush Lima.....	½ to 1 pint.....		1½ to 2	3	2½ feet.....	6 to 10 inches.
Beet.....	2 ounces.....		1 to 1½	2 to 2½	15 to 18 inches.	4 to 5 inches.
Cabbage.....	½ ounce.....	65 to 90	½	2½ to 3	2 to 2½ feet....	14 to 18 inches.
Carrot.....	1 ounce.....		½	2 to 2½	15 to 18 inches.	3 to 4 inches.
Cauliflower.....	½ ounce.....	60 to 75	½	2½ to 3	2 to 2½ feet....	15 to 18 inches.
Celery.....	.....do.....	200 to 250	½	3 to 4	18 to 24 inches.	4 to 6 inches.
Collard.....	½ ounce.....	65 to 100	½	2 to 2½	.....do.....	12 to 18 inches.
Corn, sweet.....	½ pint.....		2	3 to 3½	2½ to 3 feet....	10 to 12 inches.
Cucumber.....	½ ounce.....		1 to 1½	4 to 5	4 to 5 feet....	15 inches.
Eggplant.....	½ ounce.....	50 to 70	½	3	2 to 2½ feet....	18 to 24 inches.
Kale.....	½ ounce.....		½	2½ to 3	18 to 24 inches.	8 to 10 inches.
Lettuce.....	.....do.....	125 to 200	½	2 to 2½	15 to 18 inches.	6 to 10 inches.
Melon:						
Muskmelon.....	.....do.....		1 to 1½	5 to 6	5 to 6 feet.....	(Drills 18 inches. Hills 5 feet.
Watermelon.....	1 ounce.....		1 to 2	8 to 10	8 to 10 feet....	(Drills 2 to 3 feet. Hills 8 feet.
Okra.....	2 ounces.....		1 to 2	4	3 feet.....	2 feet.
Onion:						
Sets.....	1 quart.....		1 to 2	2	15 inches.....	3 to 4 inches.
Seed.....	1 ounce.....		½ to 1	2	.....do.....	Do.
Parsley.....	½ ounce.....		½	2	.....do.....	Do.
Parsnips.....	½ ounce.....		½ to 1	2 to 2½	15 to 18 inches.	Do.
Pea.....	1 to 2 pints....		2 to 3	3 to 4	2½ to 3 feet....	1 inch.
Potato:						
Irish.....	5 to 6 pounds..		4	2½ to 3	2 to 2½ feet....	12 to 18 inches.
Sweet.....	3 pounds.....	75 slips.	2 to 3	4 to 5	4 to 5 feet....	14 to 18 inches.
Radish.....	1 ounce.....		½ to 1	2	12 to 15 inches.	1 inch.
Salsify.....	.....do.....		½ to 1	2	15 to 18 inches.	Do.
Spinach.....	.....do.....		1 to 2	2	.....do.....	1 to 2 inches.
Squash:						
Bush.....	½ ounce.....		1 to 2	3 to 4	3 to 4 feet....	(Hills 4 feet. Drills 15 to 18 inches.
Vine.....	.....do.....		1 to 2	7 to 10	7 to 10 feet....	(Hills 8 feet. Drills 2 to 3 feet.
Tomato.....	½ ounce.....	35 to 50	½ to 1	3 to 4	2 to 3 feet....	2 to 3 feet.
Turnip.....	½ ounce.....		½ to ½	2	15 to 18 inches.	2 to 3 inches.